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LEE et al. (43) **Pub. Date: May 10, 2018**(54) **GATE DRIVING CIRCUIT AND DISPLAY APPARATUS INCLUDING THE SAME**(52) **U.S. Cl.**
CPC **G09G 3/3677** (2013.01); **G09G 2310/08** (2013.01); **G09G 2320/045** (2013.01)(71) Applicant: **Samsung Display Co., Ltd.**, Yongin-si (KR)(72) Inventors: **Jae Hoon LEE**, Seoul (KR); **Soo-Yeon LEE**, Hwaseong-si (KR); **Seok Ha HONG**, Seoul (KR); **Bong Hyun YOU**, Seongnam-si (KR); **Jai-Hyun KOH**, Yongin-si (KR)(57) **ABSTRACT**

A stage of a gate driving circuit includes: a first control transistor diode-connected between a first input end of the stage and a first node, biased by a first input signal, and back-biased by a second input signal; a second control transistor including a control end which receives a third input signal, a first end connected to the first node, and a second end connected to a first voltage, and back-biased by a fourth input signal; a first output transistor including a control end connected to the first node, a first end connected to a clock input end of the stage, and a second end connected to a first output end of the stage; and a capacitor connected between the control and second ends of the first output transistor. The second input signal and the fourth input signal have enable levels during different periods.

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